

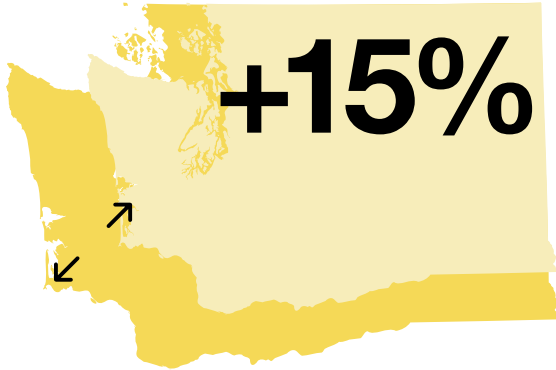
# A look into the future of Washington's workforce gaps

Students have the aptitude for jobs core to Washington's future, but data reveals a lack of exposure that will put several industries at risk.





# Pacific Northwest powerhouse



Washington's population has grown by nearly 15% in the last decade—from approximately 6.7 million in 2010 to today's 7.7 million.

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Washington is one of the best states in the nation to do business,<sup>1</sup> and its economy is propelled by some of the most recognizable companies in the world and top industries, such as aerospace, agriculture and food manufacturing, and information and communication technology.<sup>2</sup>

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As the economy grows, it is imperative for the education system to find and nurture the talent required to deliver this growth. Today, the position is quite favorable—unemployment is low<sup>3</sup> and the population increased by 14.6%.<sup>4</sup>

Many of the most important jobs pay well and have strong career paths, yet many employers are recruiting from outside of Washington state. It is vital to develop students for jobs that will be in demand in the future.

This report uses anonymized, proprietary data to show the gap between Washington students' interests, aptitudes, and best-fit careers. It features data from middle and high school students in Washington who completed the YouScience® Aptitude & Career Discovery assessment and data from administered YouScience® Industry Certifications.



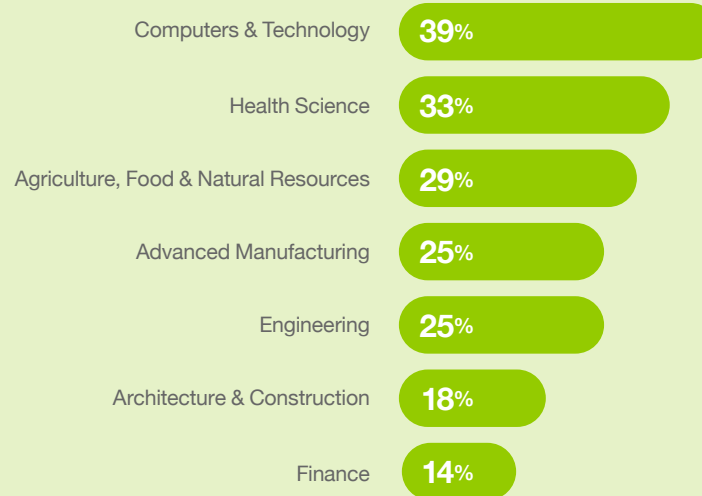
The analysis of nearly 20,000 student data sets revealed that the state's future talent pool has the aptitudes necessary for emerging and in-demand careers (especially in STEM), but they lack exposure and as a result, interest in these fields.



# Student exposure gap in Washington

YouScience data has uncovered a mismatch between the aptitudes and talents of Washington students and the career paths they are actually interested in pursuing.

Career categories that Washington students show considerably more aptitude than interest



## Washington + YouScience

17K+ students completed Aptitude & Career Discovery assessments in Washington

870K+ Industry Certifications have been administered in the state

500+ schools and organizations statewide use YouScience

85% increase in Washington high schools using YouScience in just the last few years



## INDUSTRY SNAPSHOT

# Computers & Technology

- Students with high aptitude in Computers & Technology fields
- Students with high interest in Computers & Technology fields

39% exposure gap



## KEY FINDING

**On average, Washington students have 39% more aptitude than interest for careers in Computers & Technology.**



## INSIGHT

The Washington economy has seen tremendous growth and is poised to continue to grow for years to come. However, the talent strategy needs to focus on developing local talent, not just recruiting from out of state or country. These students will be successful and take part in the vibrant economy if they see these as viable careers they can pursue today.



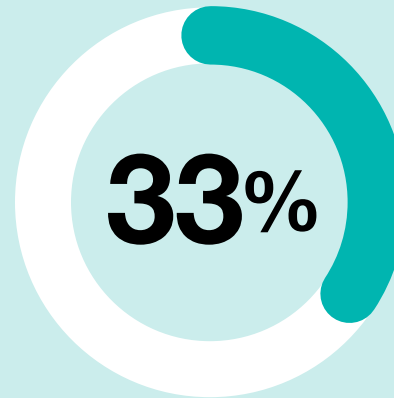
## INDUSTRY SNAPSHOT

# Health Science



### KEY FINDING

**On average, Washington students have 33% more aptitude than interest for careers in Health Science.**



### INSIGHT

Last decade, the percentage of U.S. residents who are 65 and older grew at its fastest rate in 130 years.<sup>5</sup> There's also an obesity epidemic in the country as well as ongoing mental health issues that were only exacerbated by the COVID-19 pandemic.<sup>6</sup>

These issues are just the beginning of a discussion about the importance of Health Science careers, such as medical assistants, nutritionists, and mental health counselors. With many Washington students possessing an aptitude for these careers, more must be done to expose them to potential careers in this field to ensure a healthy, supported community.



## INDUSTRY SNAPSHOT

# Agriculture, Food & Natural Resources



### KEY FINDING

**On average, Washington students have 29% more aptitude than interest for careers in Agriculture, Food & Natural Resources.**

Interest in Washington students for  
Agriculture, Food & Natural Resources

+ 29% more aptitude than interest

### INSIGHT

With access to immense natural resources, agriculture and food manufacturing are some of the most important industries in Washington. YouScience data shows students have the aptitudes to do these jobs, yet many are not considering them due to low exposure, societal biases, and uncertain paths. It is important for Washington state leaders to show students as early as possible that these are viable careers; otherwise, they risk having the talent to support this industry in the future.



## INDUSTRY SNAPSHOT

# Advanced Manufacturing



### ! KEY FINDING

**On average, Washington students have 25% more aptitude than interest for careers in Advanced Manufacturing.**

### 💡 INSIGHT

Advanced Manufacturing jobs are in demand now and will continue to be critical to the economic future of Washington state. Yet, there is bias against pursuing these careers even though the opportunities are real and plentiful, and students can explore these in high school. These careers create a good alternative for those looking to avoid the heavy burden of debt that can accompany a traditional 4-year university. Unfortunately, there's a lack of exposure to these careers.



## INDUSTRY SNAPSHOT

# Education & Training



### KEY FINDING

**On average, Washington students have 40% more interest than aptitude for careers in Education & Training.**

- Students with high interest in Education & Training fields
- Students with high aptitude in Education & Training fields

40% exposure gap



### INSIGHT

Across the U.S., educators are leaving their positions, leading all 50 states to report a teacher shortage.<sup>7</sup> This paper will not outline the reasons, but the reality is the educator pipeline that once was one of the strongest career paths is uncertain, with bachelor degrees in education dropping by nearly 50%.<sup>8</sup>

Our data shows that many students who want to pursue a career in education may lack the aptitude for it. This could be one of the reasons many educators are leaving the profession. Another reason is likely financial, as public school teachers earn approximately 24% less than other professionals with a college degree.<sup>9</sup> Regardless, more must be done for those who do have the aptitude for Education & Training. Educating the next generation of Washington students is one of the most important things the state can focus on, and it all starts with having teachers who have a passion for the profession as well as the right aptitude for it.





# Additional findings

The most popular certification is the 21st Century Success Skills exam—an important measure of a student’s soft skills. The certifications highlighted in yellow align with in-demand career fields in Washington.

Certifications that align with emerging career fields lag behind top completed exams in the state

- Top completed certifications statewide
- Certifications completed in emerging career fields statewide





# A brighter path forward

Washington students are naturally talented in high-demand career fields. What's needed are solutions that help students discover these aptitudes and connect them with education and career opportunities. YouScience® Brightpath can do that.



## Career goal identification based on aptitudes and interests

Utilize a science-based aptitude and interest assessment to help students discover their best-fit postsecondary education and career pathways to help them confidently answer the questions, “Who am I?” and “What can I become?”



## Educational goal identification and planning

Empower students to understand and explore the various postsecondary pathways available, track and organize their college applications, and explore state and federal financial aid programs to help them answer the question, “How do I become that?”



## 4-year course-taking plans

Collaborate with family, educators, and counselors to help students apply their own aptitude knowledge to plan courses, obtain beneficial certifications in select CTE courses, and be better prepared to enter the workforce or pursue a degree suited to their skills.



## Career-connected learning programs

Connect students to real-world training, with a variety of available programs implemented on the state and local levels, helping to build a resume or activity log that supports entry-level career discovery and success.



## Education-to-career tools

Provide counselors and teachers the resources to help create personalized plans for postsecondary education and training based on student aptitudes and interests.



## Industry-recognized certifications

Quantify student knowledge and skills through certifications.



## Work-based learning, internships, and apprenticeships

Connect students with business and industry partners to gain real-world work experience.



# About YouScience



**“I strongly believe that together as educators, parents, and industry representatives, we can make a difference in the lives of our students. Our mission is to empower everyone to find intentional, individual success.”**

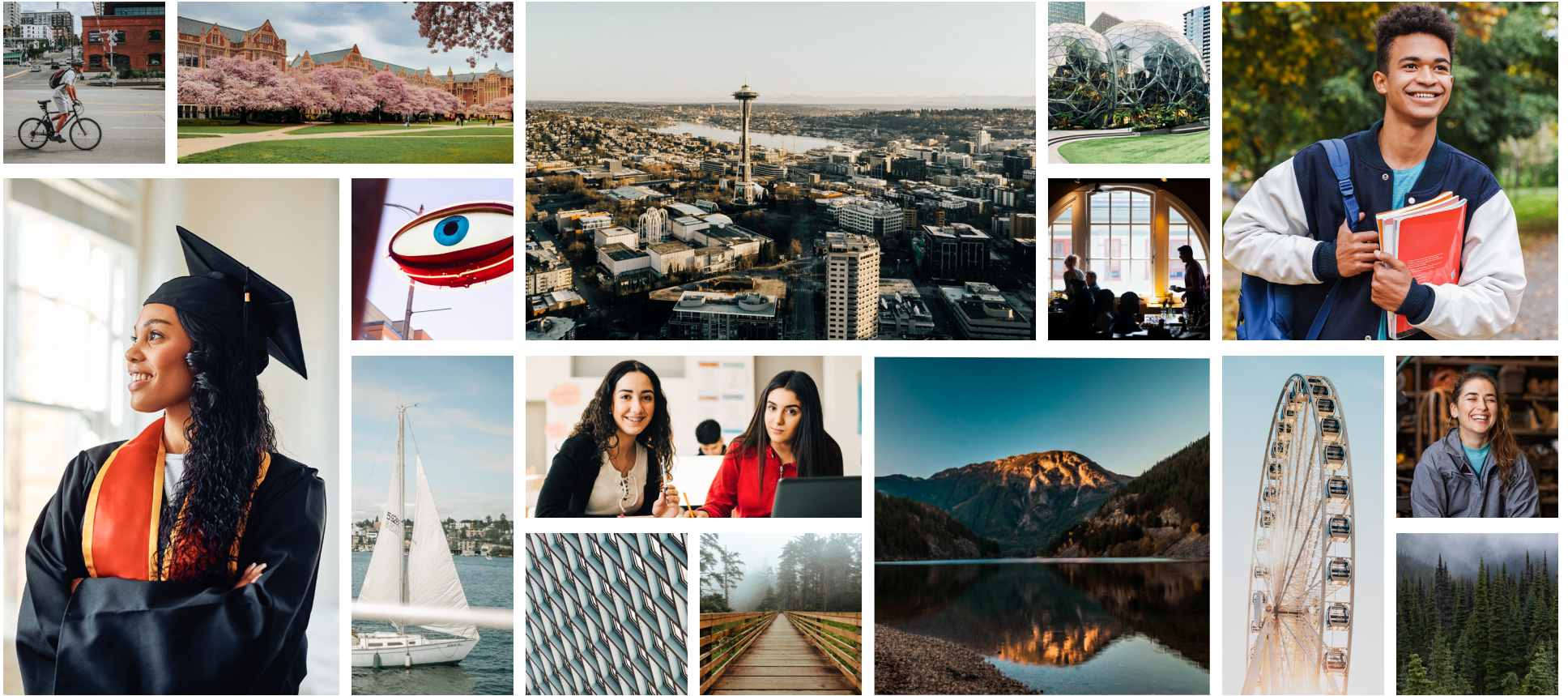
**Edson Barton**  
YouScience Co-Founder & CEO

YouScience® is the leading technology provider dedicated to solving the skills and exposure gap crisis for students and employers. Our end-to-end platform, YouScience® Brightpath, leverages proven research, artificial intelligence, and industry insights to help students identify their aptitudes, validate skills, and get matched with best-fit education and career pathways.

Individuals, parents, educators, and counselors choose YouScience to guide and empower students. Currently more than 7,000 educational institutions and millions of users nationwide use YouScience to unlock potential and plan brighter futures.



See how Brightpath can make a difference in your district, school, and classroom by visiting [youscience.com/youscience-and-washington](https://youscience.com/youscience-and-washington)



This report uses anonymized, proprietary data to show the gap between Washington students' interests, aptitudes, and best-fit careers. It features anonymized results of more than 17,000 Washington students who have completed the YouScience® Aptitude & Career Discovery assessment, and data from more than 870,000 administered YouScience® Industry Certifications. All data is accurate as of 9/19/2023.

<sup>1</sup> [wallethub.com/edu/states-with-the-best-economies/21697](https://www.wallethub.com/edu/states-with-the-best-economies/21697)

<sup>2</sup> [governor.wa.gov/issues/economy](https://governor.wa.gov/issues/economy)

<sup>3</sup> [axios.com/local/seattle/2023/07/25/washington-state-unemployment-low-record](https://www.axios.com/local/seattle/2023/07/25/washington-state-unemployment-low-record)

<sup>4</sup> [census.gov/library/stories/state-by-state/washington-population-change-between-census-decade.html](https://www.census.gov/library/stories/state-by-state/washington-population-change-between-census-decade.html)

<sup>5</sup> [pbs.org/newshour/nation/with-growing-population-of-aging-americans-u-s-median-age-jumps-to-nearly-39](https://www.pbs.org/newshour/nation/with-growing-population-of-aging-americans-u-s-median-age-jumps-to-nearly-39)

<sup>6</sup> [ncbi.nlm.nih.gov/pmc/articles/PMC8899440](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8899440)

<sup>7</sup> [brookings.edu/articles/are-we-at-a-crisis-point-with-the-public-teacher-workforce-education-scholars-share-their-perspectives](https://www.brookings.edu/articles/are-we-at-a-crisis-point-with-the-public-teacher-workforce-education-scholars-share-their-perspectives)

<sup>8</sup> [cbsnews.com/news/education-majors-colleges-decline-teacher-pay](https://www.cbsnews.com/news/education-majors-colleges-decline-teacher-pay)

<sup>9</sup> [epi.org/publication/teacher-pay-penalty-2022](https://www.epi.org/publication/teacher-pay-penalty-2022)